#### UNIT-1

- 1. Mention various air pollutants, their sources and effects on human health and environment.
- 2. Explain the measures to be taken to control particulate emission at source.
- 3. Explain the principle and working of settling chambers. Discuss merits and demerits.
- 4. Explain the working of cyclone. Explain the factors influencing the efficiency of cyclone.
- 5. Explain the working of bag filters. Discuss merits and demerits.
- 6. What are the properties of a good filter material.
- 7. Explain the working of Electrostatic precipitators. Discuss merits and demerits
- 8. Discuss the merits and demerits of wet scrubbers.
- 9. Write the properties of an ideal adsorbent
- 10. Discuss the methods of controlling gaseous pollutants
- 11. Explain the methods of controlling Sox
- 12. Explain different methods of controlling NOx
- 13. Write about ambient air quality standards in India.
- 14. Discuss the salient features of Air Act.
- 15. Explain the effects of noise pollution on human health and environment
- 16. Explain different methods of controlling outdoor noise pollution

## UNIT -2

- 1. Explain any example of volume reduction of industrial waste.
- 2. What are the advantages of reducing waste volume?
- 3. Discuss the strategies to reduce pollution from industries.
- 4. Discuss the methods of volume reduction of waste water.
- 5. Give examples of strength reduction of wastewater by modification of process.
- 6. Explain the methods of strength reduction give one example for each method.
- 7. What is equalization? Explain the advantages of Equalization.
- 8. Explain the criteria for fixing the volume of equalization tank.
- 9. Differentiate between equalization and neutralization.
- 10. Explain the concept of Common Effluent Treatment Plant (CETP).
- 11. Discuss the importance of fixing effluent standards.
- 12. What are the advantages and disadvantages of recycling industrial wastes?
- 13. Discuss the principles of waste minimization in industries

## UNIT -3

- 1. Classify the solid waste based on source and nature.
- 2. Discuss the importance of RRR in controlling pollution
- 3. Explain the steps in source reduction of solid waste and its advantages
- 4. Explain the seven step process of planning a solid waste management system for a community.

- 5. Discus the advantages and disadvantages of segregation of solid waste
- 6. Explain the parameters to be considered in vehicle routing in collection of solid waste.
- 7. Discuss different techniques used in centralized solid waste segregation.
- 8. Discuss the advantages and disadvantages of composting
- 9. Explain the process of solid waste disposal by landfill.
- 10. Explain the precautions to be taken to control Leachate.
- 11. Discuss the role of citizens in Solid waste management.
- 12. Explain the effect of solid waste on environment.

#### UNIT-4

- 1. What is meant by environmental sanitation? Discuss the general principles of sanitation.
- 2. How to maintain better sanitation in hostels?
- 3. Explain the steps to be followed to maintain sanitation in hospitals
- 4. Discuss the measures to be taken to maintain sanitation at public gatherings.
- 5. Explain the health effects of not maintaining sanitation.
- 6. Discuss the measures to be taken to maintain sanitation in swimming pools.
- 7. Explain the working of septic tank. How the effluent from septic tank is to be disposed.
- 8. How to maintain sanitation in schools?
- 9. Discuss the steps to improve sanitation in rural areas.

# <u>UNIT -5</u>

- 1. Discuss the characteristics of hazardous waste.
- 2. Explain the process of handling hazardous wastes.
- 3. What are different types of biomedical waste? How they are handled?
- 4. Explain the effects on health and Environment due to improper handling of biomedical waste.
- 5. Explain the process of handling E waste.
- 6. Discuss the impact of radioactive waste on health and environment.
- 7. Explain the process of handling radioactive waste.
- 8. Explain the importance of Sustainable development.
- 9. What are the indicators of sustainable development?
- 10. Discuss about barriers for sustainable development.
- 11. Discuss the effect of cleaner production in achieving sustainable development